A second order dynamical system with variable damping associated to a nonconvex minimization

Darvay Zsolt

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Abstract

In this talk we present a new predictor-corrector interior-point algorithm for solving sufficient linear complementarity problems. The introduced interior-point method uses a new type of algebraic equivalent transformation on the centering equations of the system defining the central path. The search direction can be derived from a positive-asymptotic kernel function as well. We prove the polynomial iteration complexity of the algorithm.